



**US Army Corps
of Engineers®**

Seattle District

Notice of Preparation

Planning and Project Management Division
Environmental Resources Branch
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: Zachary Wilson (PME)

Public Notice Date: 21 September 2017
Expiration Date: 05 October 2017
Reference: PME-17-09
Name: St. Maries Levee Rehabilitation

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Seattle District (Corps) plans to prepare, pursuant to the National Environmental Policy Act (NEPA), an environmental assessment (EA) for previously completed and proposed levee repairs on the St. Joe River at the St. Maries Levee in the City of St. Maries, Benewah County, Idaho. Repairs are intended to address damage caused during the March 2017 flood event when a combination of snowmelt and rainfall resulted in a sustained river level over the flood stage. Emergency work was completed on March 24, 2017. The purpose of this Notice is to solicit comments from interested persons, groups, and agencies on the Corps' proposed action under NEPA.

AUTHORITY

The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code Section 701n). Corps rehabilitation and restoration work under this authority is limited to flood control works damaged or destroyed by floods. The statute authorizes rehabilitation to the level of protection exhibited by the flood control work prior to the damaging event. The City of St. Maries, Idaho is the non-federal local sponsor for this project.

NEED

High river flows over the course of 5 days in the St. Joe River resulted in slope damage (including slope failure) and loss of toe rock. The damage is located in a continuous stretch but is separated into three sections: (1) 500 feet of toe rock lost in front of a floodwall, (2) 200 foot long slope failure, and (3) 1,300 feet of toe rock and support damage. Total length of damage is 2,000 feet. The levee requires an emergency repair prior to the upcoming St. Joe River flood season to ensure reliable flood protection for the City of St. Maries. In the damaged state, the level of protection is diminished from 1,000 year level of protection to a 3-year level of protection. The location of the damaged levee is shown in Attachment A and photographs of the damage are in Attachment B.

PURPOSE

The purpose of the project is to repair the damaged levee and return it to the level of flood protection found prior to the March 2017 flood event in order to protect lives and property from subsequent flooding.

COMPLETED ACTION

On March 14, 2017 the City of St. Maries requested assistance from the Corps. Corps flood team members provided assistance during a flood for 10 days until March 24, 2017. Assistance was provided within the same location as the preferred proposed action discussed below. The flood team assisted the city of St. Maries with temporary protective measures to reduce the risk of levee failure. The Corps placed riprap along the riverside of the levee where it was actively eroding or exhibited slope failure. Additionally, the Corps placed spalls on the landward side of the levee to prevent seepage and possible levee failure.

PROPOSED ACTION

Multiple alternatives for the repair may be considered as follows:

- No Action. The no-action alternative would leave the levee in its current condition. This would result in a reduced level of protection and the greater probability of increased damages or breaching during future flooding. A breach in the levee could damage homes, a lumber facility (a major employer in the area) and disrupt clean-up operations at a St. Maries Creosote superfund site.
- Repair In-Kind Alternative (Preferred Alternative). This alternative would repair the levee to its pre-damaged condition through reconstruction of the levee slope and reestablishment of the riverward toe throughout the damaged extent. Repairs would occur in December and take at most 6 weeks to complete. Armor protection lost in front of the upstream floodwall would be replaced with a one foot spall blanket overlaid by two feet of Class II riprap (Section 1; 500 feet). The failed levee slope section would be excavated to the foundation and an access bench excavated to allow access to the toe area. Class II riprap would be placed in the scour hole to re-establish the riverward toe and the levee prism re-constructed in compacted lifts. A one foot thick spall rock blanket would be placed on the riverward slope, and overlaid with a two foot layer of Class II riprap (Section 2; 200 feet). The repair downstream of the slope failure (Section 3; 1,300 feet) would establish a new riverward toe using Class II riprap. The previous toe was held in place by wood pilings which were part of the original design, but are now failing after more than 75 years in service. Spall rock and Class II riprap armor would be placed on the slope, with additional material placement to the top of levee, to restore the level of protection. Total repair length is estimated at 1,300 feet. See Attachment C for draft cross sections of the repairs.
- Setback Levee. This alternative would shift the alignment of the levee embankment landward by a yet-to-be-determined distance in order to avoid or minimize direct contact with the river current. Typically, the setback would be a newly-constructed earth embankment structure and would include abandonment of the existing levee along the river bank. Construction of a setback levee may not be completed prior to the next flood season and may be more costly than other alternatives due to more extensive embankment material requirements. This approach would encroach on existing structures and privately-owned land, including the extensive Potlach lumber mill. It may also impact cleanup of a nearby Superfund site. On this basis, this alternative would be problematic to implement.

- Non-Structural Alternative. This alternative consists of floodplain management strategies generally involving changes in land use offered by other federal and state programs. Such strategies would include zoning, easements, flood warning, floodplain evacuation, and flood insurance. Nonstructural strategies would also involve acquisition, relocation, elevation, and flood proofing existing structures. The project sponsor has been informed of their options to pursue a Nonstructural Alternative Project and after they considered it, they found it unacceptable.

ANTICIPATED IMPACTS

Impacts anticipated at this point are as follows:

Wetlands. No wetlands were identified at the repair sites during an initial site visit. If wetlands are found, the project will be designed to avoid wetland impacts to the maximum extent practicable. If wetland impacts are unavoidable, compensation for wetland impacts may be pursued. Further impact analysis, consideration of mitigation for any wetland loss, and coordination would occur during the engineering and design phase.

Biological Resources. The following species listed under the Endangered Species Act (ESA) as threatened (T) and their associated designated critical habitat (CH) are located in the project area:

- Bull trout (T) (CH)
- North American Wolverine (Proposed T)

Bull trout are present in the St. Joe River and implementation of the proposed repair has the potential to result in short-term increases in suspended sediment, noise and turbidity. Bull trout use this portion of the river as a migration corridor to and from upstream spawning habitat. The project is not expected to affect the ability of the St. Joe River to function as migratory habitat for bull trout in the long run as this reach is already heavily altered and developed. However, short term noise and rock placement related impacts may occur. Individual bull trout may be present in the river at the time of repair migrating through and could be impacted or harassed by construction related impacts. Wolverines are not expected in the project area due to lack of suitable habitat, thus there would be no effect to wolverines.

Although Bald Eagles were delisted under ESA on June 28, 2007, they continue to be protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. These Acts require protection measures to continue to prevent bald eagle “take” resulting from human activities. Impacts to bald and golden eagles will be considered as a part of the NEPA process.

When completed, this levee repair is not intended or expected to generate appreciable change in habitat conditions as compared with conditions pre-existing the flood event. Repair construction work may result in short-term impacts to fish and wildlife. If present, adult and juvenile bull trout may be temporarily displaced from the project area. Construction noise may temporarily disturb any wildlife in the project area. Long-term effects would include continued channelization of the river as the levee is maintained in its current alignment (the *status quo* condition).

Water Quality. There may be a temporary increase in turbidity due to construction and reestablishment of the levee toe. Some grassy vegetation and organic matter inputs into St. Joe River may occur. No long-term impacts are expected.

Cultural Resources. Prior to repairs, a Corps archeologist will conduct a cultural resources survey of the project area to determine whether there is a potential for the proposed repairs to cause effects to historic properties. The Corps will evaluate the project and prepare documentation necessary pursuant to compliance with Section 106 of the National Historic Preservation Act (NHPA). The report will include the findings of the investigations for each repair site, recommendations for archaeological monitoring during construction, and a determination of effects to archaeological and historic properties. The Corps' determinations of effects to historic properties, the investigation report, and monitoring plan will be coordinated with the appropriate state and/or tribal historic preservation officers to obtain compliance with Section 106 of the NHPA prior to initiation of construction.

Air Quality. Construction vehicles and heavy equipment would temporarily and locally generate exhaust fumes, carbon dioxide (CO₂), carbon monoxide (CO), and dust on roadways. These emissions would likely be exempt from the conformity requirements under the Clean Air Act, because the project constitutes a routine facility repair activity generating an increase in emissions that is clearly *de minimis*, under 40 CFR 93.153(c)(2)(iv). Emissions would be estimated in the EA to check if levels are *de minimis*. Unquantifiable but insignificant exacerbation of effects of CO₂ emissions on global climate change is also anticipated.

Noise. Temporary increases in noise would occur as a result of the repair but this is expected to have minimal impacts due to the background noise generated from the lumber mill. Work would be performed during daylight hours to minimize the adverse effects of noise on residents. Noise impacts are expected to be short in duration with no long-term increases expected.

Traffic. Construction-related traffic would cause minor temporary increases to, and disruption of, local traffic. Efforts would be made to minimize disturbances to traffic patterns during construction through appropriate work hours, signage and notifications and proper traffic controls.

Cumulative Effects. The currently preferred alternative would maintain the *status quo*. Individually, the project may have small environmental effects resulting from the construction action itself. However, the repair maintains the *status quo* (leveed shoreline) and contributes cumulatively to the existing conditions of the St. Joe River in the St. Maries area.

EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposed levee repair can be adequately evaluated under the NEPA through preparation of an EA, which is currently underway.

In accordance with Section 7(a)(2) of the Endangered Species Act, the Corps will consult with the U.S. Fish and Wildlife Service, regarding the impact of the project on listed species and/or designated critical habitat.

The Corps will review the latest published version of the National Register of Historic Places (NRHP), lists of properties deemed eligible, and other sources of information. The Corps will document the current state of knowledge regarding the presence or absence of historic properties and the effects of the undertaking upon the properties.

In preparation of the environmental documentation for this project, coordination has been conducted, is ongoing, or may be initiated with the following public agencies:

- (1) U.S. Fish and Wildlife Service
- (2) Environmental Protection Agency
- (3) Coeur d'Alene Tribe of Indians
- (4) Kootenai Tribe of Idaho
- (5) Nez Perce Tribe of Idaho
- (6) Confederated Salish and Kootenai Tribes
- (7) State Historic Preservation Office
- (8) Idaho Department of Environmental Quality

COMMENT AND REVIEW PERIOD

The Corps invites submission of factual comment on the environmental impact of the proposal from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the effects of this activity. To make this decision, comments are used to assess impacts such as those on ESA listed species, historic properties, water quality, and other general environmental effects. The Corps will consider all submissions received before the expiration date of this notice. The nature or scope of the proposal may be changed upon consideration of the comments received. The Corps will initiate an Environmental Impact Statement (EIS), and afford the appropriate public participation opportunities attendant to an EIS, if significant effects on the quality of the human environment are identified and cannot be mitigated.

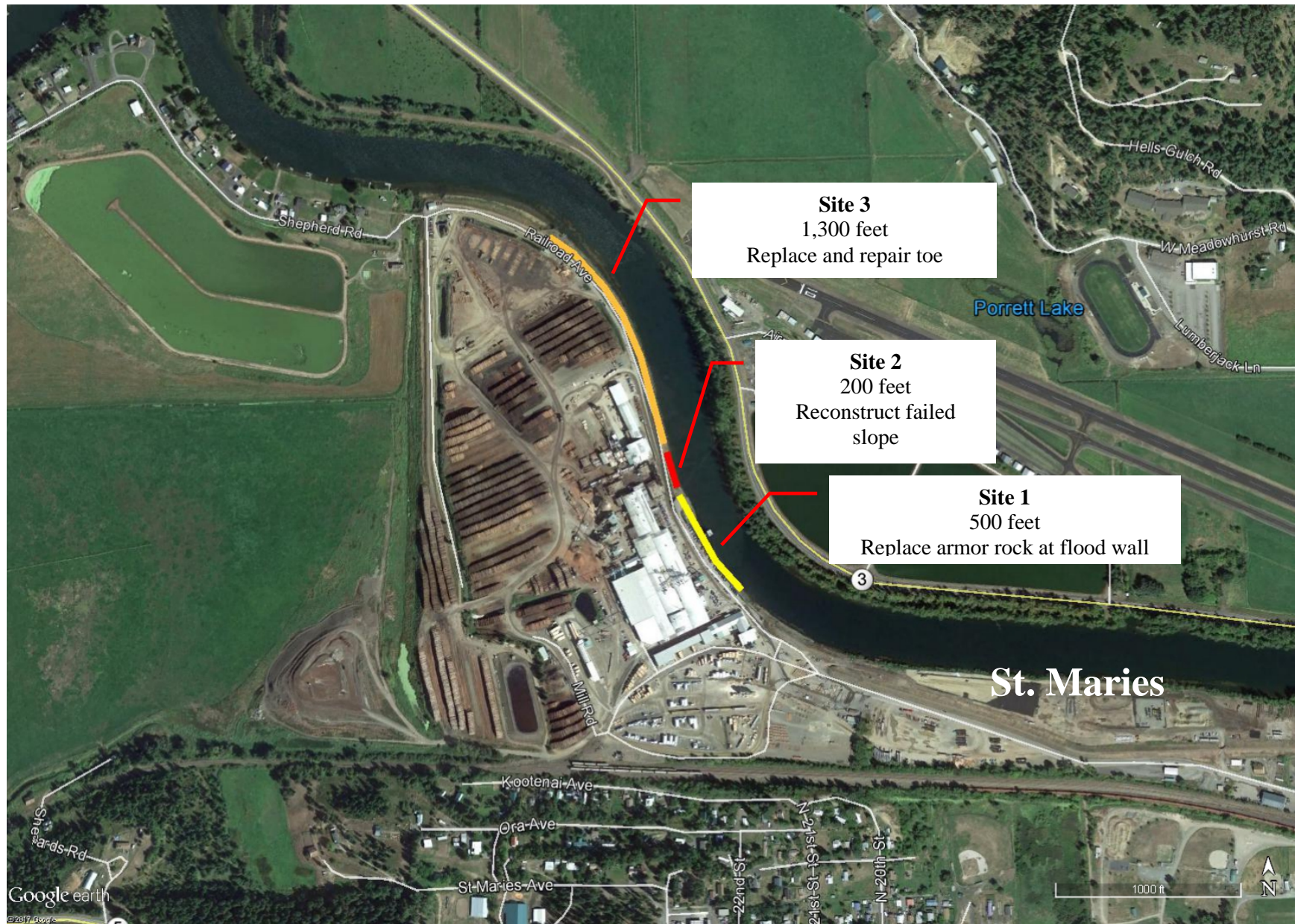
COMMENTS TO THE CORPS OF ENGINEERS

Submit comments to this office, Attn: Environmental and Cultural Resources Branch, no later than *15 days after the date of this notice* to ensure consideration. In addition to sending comments via mail, comments may be e-mailed to Zachary.m.wilson@usace.army.mil. This Notice of Preparation can be found at the following website: <http://www.nws.usace.army.mil/Missions/Environmental/Environmental-Documents/> under "St. Maries Levee Rehabilitation." Requests for additional information should be directed to Mr. Zachary Wilson at 206-316-3896 or the above e-mail address.

Enclosed:

Attachment A – Project Location Map
Attachment B – Project Damages
Attachment C – Draft Cross Section

Attachment A – Project Location Map



Attachment B – Project Damages



Figure 1. Site 1, scour damage in front of flood wall.



Figure 2. Site 2, slope failure viewed from levee top.

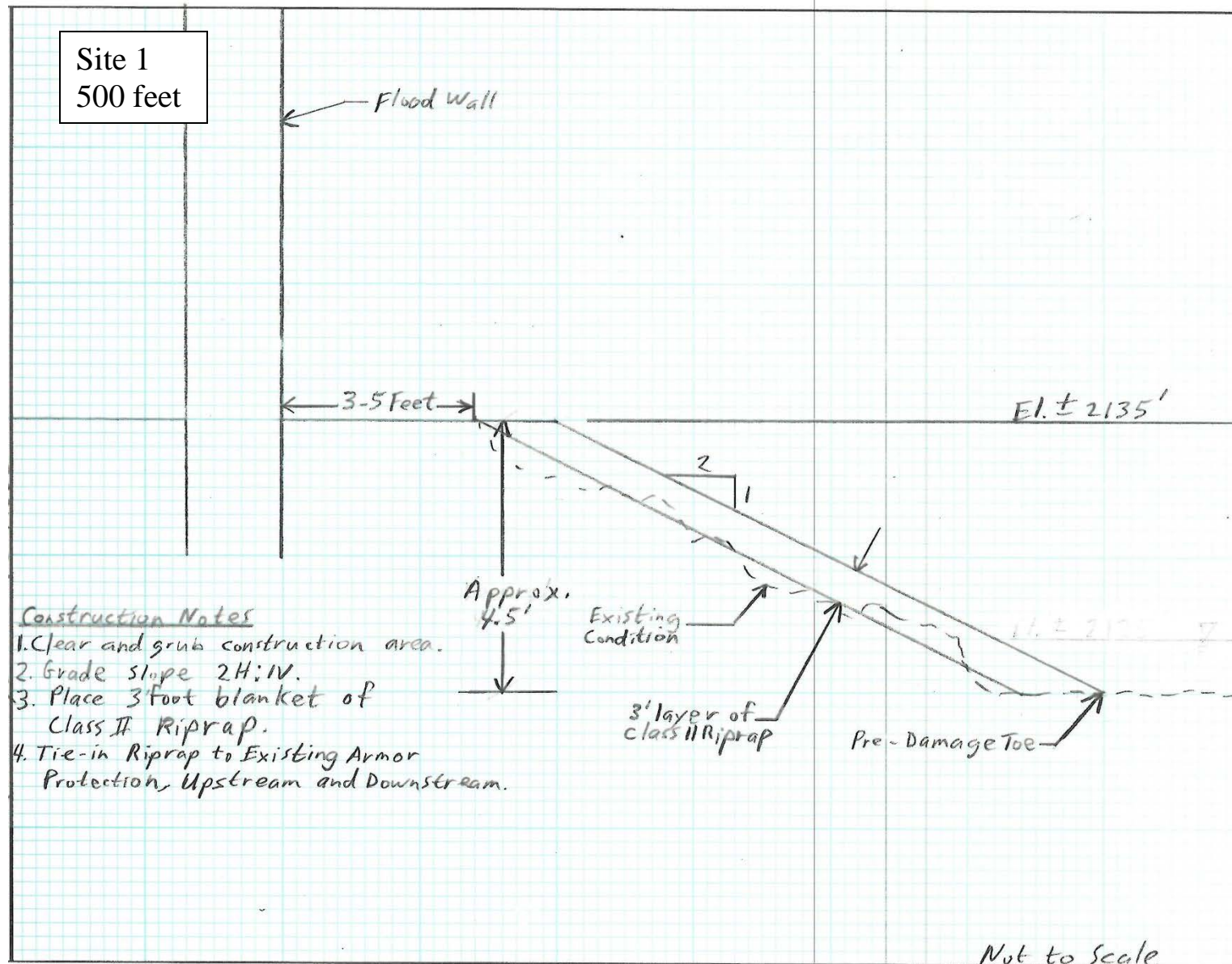


Photo 3. Site 2, slope failure as viewed from below.

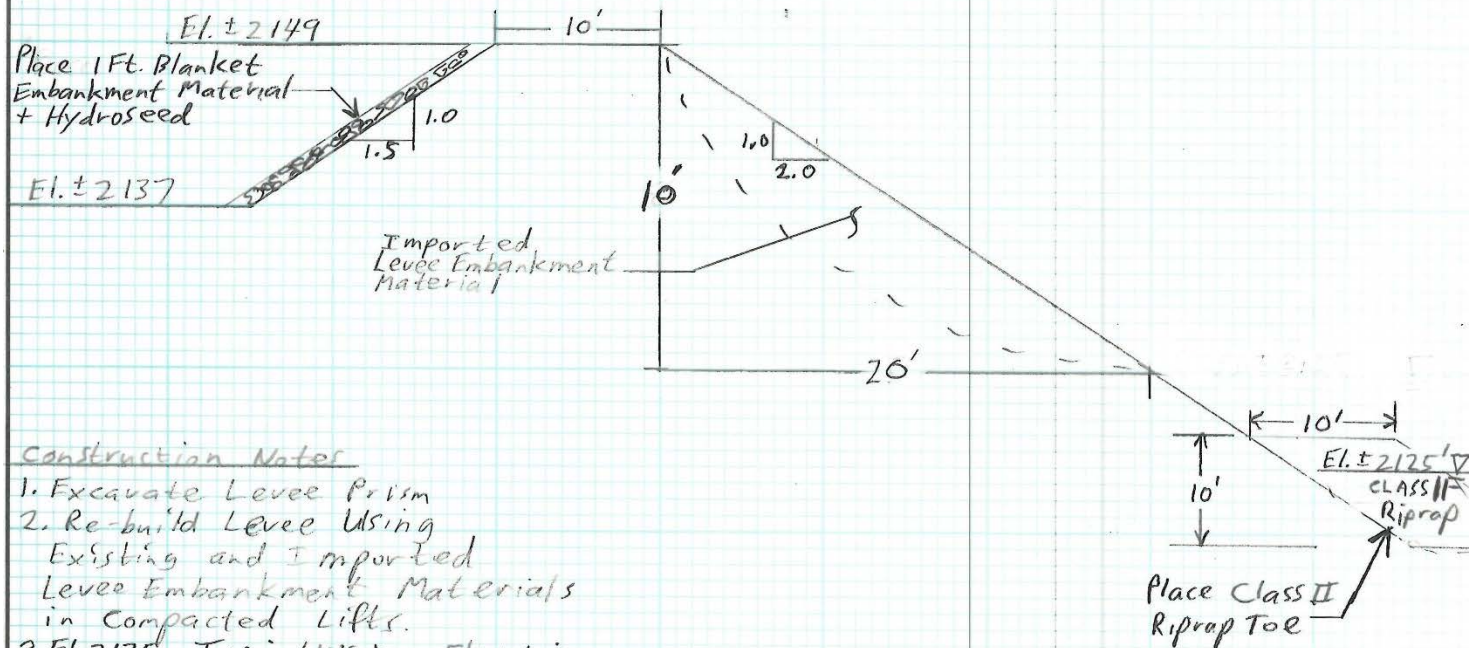


Figure 4. Site 3, toe damage (hidden by vegetation along toe and high water).

Attachment C – Draft Cross Section



Site 2
200 feet

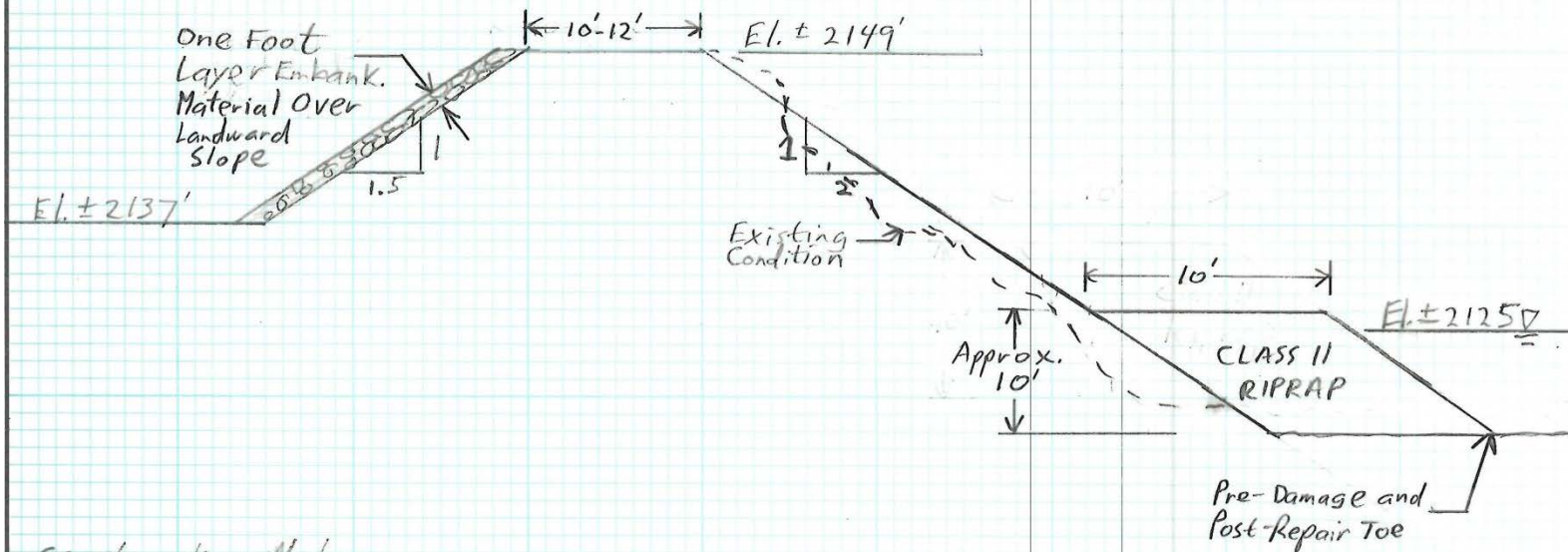


Construction Notes

1. Excavate Levee Prism
2. Re-build Levee Using Existing and Imported Levee Embankment Materials in Compacted Lifts.
3. El. 2125 - Typical Winter Elevation
4. Restore Riprap Armor Blanket on Riverward Slope.
5. Place Class II Riprap Toe.
6. Tie-In to Existing Riprap Upstream + Downstream
7. Hydroseed Landward Side of Levee.

Not to Scale

Site 3
1,300 feet



Construction Notes

1. Reshape Riverward Slope, incl. Existing Riprap Armor.
2. Place Class II Riprap At Riverward Toe.
3. Place Embankment Material Over Spalls on Landward Slope.
4. Hydroseed Landward Slope.
5. El. 2125' - Typical Winter Elevation.
6. Tie-in Riprap to Existing Armor Protection Upstream and Downstream.

Not to Scale